



# Versantis Awarded Innosuisse Grant of CHF475,000 to Develop Point of Care Device to Monitor Blood Ammonia in Liver Disease Patients

**Project Leverages Expertise of ZHAW School of Engineering to Develop Prototype Device**

**Device Provides Commercial Potential as Both Standalone Product and Companion Diagnostic to Therapeutic Pipeline**

**Zurich, Switzerland, April 13, 2022** – Versantis, a clinical-stage biotechnology company developing novel therapies for orphan and pediatric liver diseases, today announced that Innosuisse, the Swiss national innovation agency, will co-fund a project to develop a prototype portable point-of-care (POC) device for blood ammonia monitoring. Increased blood ammonia levels are a common sign of chronic and acute liver diseases and lead to hepatic encephalopathy (HE), a serious and potentially fatal complication. To date, ammonia monitoring is a time-consuming process involving health care professionals, laboratory equipment, and burdensome hospital logistics. Innosuisse will contribute approximately CHF475,000 to the project.

Versantis will enlist the ZHAW School of Engineering to develop a prototype POC device based on the polymersome-based ammonia quantification method TS-01, developed and validated by ETH Zürich and published recently in [Nature Scientific Reports](#). The ZHAW School of Engineering will receive the grant funding to develop the optoelectronic component and engineer the biomedical instrumentation for the prototype device.

“There is a great unmet medical need for an accurate and user-friendly device to monitor the levels of ammonia in patients with liver disease,” said Dr. Vincent Forster, CSO and co-Founder of Versantis. “Hyperammonemia and its associated neurological manifestations, such as hepatic encephalopathy, affects 30-45% of cirrhotic patients and can lead to coma and death. We believe using a novel portable point-of-care device will allow daily monitoring of ammonia, thereby significantly reducing hospitalizations and fatal outcomes for patients, while also saving time, effort, and expense of health care professionals, supporting caregivers, and family members.”

“This Innosuisse grant will allow us to advance our TS-01 technology to a fully-functional in-vitro diagnostic (IVD) POC device and partner with leading IVD manufacturers for planned marketing

authorization and commercialization,” said Mark Fitzpatrick, CEO of Versantis. “The numbers of patients with cirrhosis continue to grow rapidly and a large proportion of them would benefit from better monitoring. This unique technology provides us with a significant market opportunity both as a standalone product and as a companion diagnostic to our lead therapeutic product candidates VS-01 and VS-02, potentially alleviating the growing healthcare burden associated with ACLF and HE.”

“We are eager to start this exciting project and bring our engineering expertise to design a state-of-the-art prototype and help transfer the technology to the patient bed side,” said Prof. Mathias Bonmarin, Head of the Sensors and Measuring Systems Lab at ZHAW School of Engineering.

### About TS-01

TS-01 is a unique point-of-care diagnostic device in prototype development for the at-home measurement of ammonia in blood, the primary cause of HE. The TS-01 assay exclusively licensed by Versantis is based on transmembrane pH-gradient polymersomes that encapsulate a pH-sensitive ratiometric fluorophore. By measuring this fluorescence signal, the ammonia concentration in the sample can be determined. TS-01 has been shown to be accurate across a wider physiological and pathological ammonia concentration range than today’s existing instrumentation and is negligibly impacted by endogenous interferences.

### About Versantis

Versantis is a clinical stage biotechnology company focused on addressing the growing, unmet medical need in liver diseases. With a pipeline of drug and diagnostic product candidates to potentially address chronic and orphan acute indications, Versantis believes it can revolutionize current standard of care for patients suffering from acquired and genetic hepatic deficiencies. Versantis’ lead program, VS-01, is in clinical development as a potential first-line therapy for the timely reversal of acute-on-chronic liver failure (ACLF). It harnesses Versantis’ proprietary scavenging liposomes to extract ammonia and ACLF-related metabolites from the body and, if approved, will be the first drug to take advantage of the intraperitoneal route to potentially support the liver, kidneys and brain, the organs that most often acutely fail in cirrhotic patients. VS-01 has received orphan drug designation (ODD) from the EMA and U.S. FDA, as well as a Rare Pediatric Diseases Designation from the U.S. FDA for Urea Cycle Disorders. Founded by scientists from ETH Zurich with entrepreneurial drive, Versantis has built a team and Board of seasoned industry executives with a proven ability to advance novel therapies from the idea stage into clinical development, regulatory approval, and commercial launch. The company is headquartered in Zurich, Switzerland, with an established wholly-owned U.S. subsidiary, Versantis, Inc. For additional information, visit: [www.versantis.com](http://www.versantis.com).

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